

REMARKS

Claims 1-28 were examined in the Office Action mailed September 8, 2005.

Currently pending are:

- Objections to the Drawings and Specification related to (i) the arrangement of the connecting piece relative to inner and outer radii of the hub and friction portions, and (ii) the caliper mount.
- Rejection of Claims 1-5, 7-8, 10-11, 13-14, 16-18, 20-21, 23-24 and 26-27 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 2,655,237 to Benson ("Benson").
- Rejection of Claims 6, 9 12, 15, 19, 22, 25 and 28 under 35 U.S.C. § 103(a) as unpatentable over Benson.
- Provisional rejection of claims 1 and 16 under the judicially-created doctrine of obviousness-type double-patenting as unpatentable over claims 1 and 3 of application Ser. No. 10/803,050, in view of Benson.

The Applicant wishes to again thank the Examiner for the courtesies extended in the interview conducted on September 15, 2005. Consistent with these discussions, the Applicant submits the foregoing amendments and following remarks.

1. The Drawing and Specification Objections: The Specification amendments filed July 5, 2005 were intended to respond to the Examiner's concern regarding the arrangement of the connecting portion of the claimed brake disc relative to the inner and outer radii of the hub and friction portions of the disc. Based on the discussions in the September 15, 2005 Interview, the Applicant is attempting to address the Examiner's concern with a different approach, amending the Specification and independent claims 1 and 16 to recite that "the connecting flange portion extends from a radially outer region of the hub portion to a radially

inner region of the friction portion.” The Applicant respectfully submits this approach eliminates any potential ambiguity by eliminating references to specific radii.

As to the pending objection regarding the proposed drawing and Specification change to illustrate a caliper mount, the only reason these changes were proposed was to address the Examiner’s requirement for illustration of a caliper mount. As discussed in the Interview, one of ordinary skill in the art would recognize that the presence of a caliper mounting system is an inherent feature of common disk brake designs (hence, its omission from the originally filed Fig. 2 as unnecessary for illustration and understanding of the present invention). Thus, in responding to the Examiner’s request for illustration of a mount, the Applicant merely added a schematic illustration of a common bolted flange attachment. The Applicant respectfully submits that the addition of an inherent and extraordinarily well-known caliper mount to Fig. 2 does not rise to the level of addition of new matter.

In view of the foregoing amendments to address the “radius” issue, and the inherency of the schematically illustrated caliper mount, reconsideration and withdrawal of the pending drawing and specification objections is respectfully requested.

2. The Rejections Based on Benson: The Applicant respectfully traverses the rejections of claims 1-28 under §§ 102(b) and 103(a) over Benson.

In the September 8, 2005 Office Action, it is maintained that Benson’s connecting flange 13 can be interpreted as extending from an outer radius of hub 7

to an “inner radius” of friction portion 19. September 8, 2005 Office Action at 4, 8-9.

For the record, the Applicant must note that the portion of friction ring 19 to which flange 13 extends is an inner *surface* of friction ring 19, at an outer peripheral edge of the friction ring, not an inner *radius*. While flange 13 is bolted to what may be characterized as an “inner” surface (*i.e.*, of the friction ring a surface facing an inside of a wheel), there is no “radius” at this point (other than the *radially* outer radius of the friction ring 19) – no structure in the axial direction other than the planar surface of the ring, which one of ordinary skill would not consider to be a “radius” of the friction ring. Benson therefore does not disclose or suggest the brake disc recited in pending claim 1.

Notwithstanding the foregoing, the Applicant is pleased to note that the amendments to address the drawing and specification objections effectively render this issue moot. As amended, independent claims 1 and 16 now recite that the connecting flange portion “extends from a *radially* outer region of the hub portion to a *radially* inner region of the friction portion.” There is no question that Benson’s flange 13 extends to a *radially outer* portion of friction ring 19, and thus does not disclose or suggest the invention recited in claims 1 and 16. Accordingly, withdrawal of the pending rejections based on the Benson reference is respectfully requested.

3. The Double-Patenting Rejection: The Applicant respectfully traverses the provisional double-patenting rejection of claims 1 and 16 as obvious over claims

1 and 3 of Ser. No. 10./803,050 in view of Benson, on the grounds that Benson does not teach or suggest the features for which it is cited.

Benson is cited as teaching in figure 1 the use of a friction portion 19 'having an outer radius that is greater than the inner radius of the wheel rim 12.'

September 8, 2005 Office Action at 7. The Applicants note that in fact Benson Fig. 1 illustrates friction ring 19 and the adjoining portion of the connecting flange 13 to be *smaller* in diameter than the wheel rim. Specifically, as shown in the top and bottom right corners of Fig. 1, the Benson brake (which Benson characterizes as a drum brake) is *overhung* by the outermost portions of the wheel rim (the outer tire bead seating flanges).¹ Thus, because no portion of the Benson friction ring 19 extends radially beyond the wheel rim, *one of ordinary skill in the art would not have perceived any teaching or suggestion of the present invention's novel extension of a brake disc friction ring beyond the wheel rim.*

Because Benson fails to teach or suggest the features of claims 1 and 16 for which it is cited, withdrawal of the pending provisional double-patenting rejection is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, the Applicant submits the pending claims are in condition for allowance, and respectfully requests issuance of

¹ For clarity, the Applicant has amended claims 1 and 16 to recite that the inner radius of the wheel rim is the radius which is the largest inner radius of the rim: "the friction portion has an outer radius greater than ~~an~~ a greatest inner radius of the wheel rim."

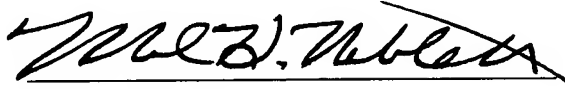
a Notice of Allowance for claims 1-28.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #011351.52877US).

February 8, 2006

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mark H. Neblett", is written over a horizontal line.

Jeffrey D. Sanok
Registration No. 32,169
Mark H. Neblett
Registration No. 42,028

CROWELL & MORING, LLP
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844